



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,860	09/09/2003	Massimiliano Castellani	18201.8	2057

25854 7590 12/08/2005

BRYAN W. BOCKHOP, ESQ.  
2375 MOSSY BRANCH DR.  
SNELLVILLE, GA 30078

EXAMINER
----------

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/657,860	<b>Applicant(s)</b> CASTELLANI, MASSIMILIANO	
	<b>Examiner</b> Jennifer A. Boyd	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Applicant's Amendments and Accompanying Remarks, filed September 9, 2005, have been entered and have been carefully considered. Claim 1 is amended and claims 1 – 12 are pending. In view of Applicant's amendments requiring the wipe is consisting essentially of a partially thermally bonded thermoplastic carded carrier web, an absorbent non-woven web comprising philic thermoplastic fibers and a fibrous meltblown abrasive finish, the Examiner withdraws all previously set forth rejections as detailed in Office Action dated June 6, 2005. After another search was conducted, additional prior art has been found which renders in the invention as currently claimed unpatentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Objections***

3. Claims 1 and 3 - 4 are objected to because of the following informalities:

4. Please change "bounded" to "bonded" in claims 1 and 3. Please change "per cent" to "percent" in claim 5. Appropriate correction is required.

5. Claims 3 and 4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 already has the limitations of the porous

Art Unit: 1771

nonwoven carrier web comprises a partially bounded thermoplastic and that the porous nonwoven carrier web is thermoplastic.

***Double Patenting***

6. Claims 1 – 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 11 copending Application No. 10/458,331. The details of the double patenting rejection can be found in the previous Office Action.

7. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

8. Claims 1– 4, 8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Pelham, SR (US 2004/0110443).

Pelham is directed to abrasive webs and methods of making the same (Title).

As to claims 1, 3 – 4, 8 and 12, Pelham teaches a wipe comprising an outer layer of abrasive meltblown nonwoven fabric and at least one absorbent nonwoven fabric bonded to the abrasive meltblown non-woven fabric (page 8, [109]). Pelham teaches that the fibers in the meltblown web have a diameter ranging from 0.5 to 40 microns, preferably 10 to 35 microns (page 2, [0028]); the Examiner equates this to Applicant's "a fibrous meltblown finish". The absorbent layers in the form of nonwoven fabrics can include a meltblown fabric layer, spunbonded fabric layer, a spunlaced fabric layer, a carded thermally-bonded (or point-bonded) nonwoven containing a percentage of viscose fibers or other hydrophilic fibers, or combination

Art Unit: 1771

thereof (page 2, [0033]). In view of this disclosure, in one embodiment of the invention, the wipe can comprise an outer layer of abrasive fibers, an intermediate absorbent nonwoven layer and an outer absorbent nonwoven layer. The Examiner equates the intermediate absorbent nonwoven layer to Applicant's "absorbent non-woven web" and the outer absorbent nonwoven layer to Applicant's "thermoplastic non-woven carded partially bonded thermoplastic carrier web". Pelham shows in Figure 3 bonding the layers together by calendaring/point-bonding pattern (page 4, [0055 – 0056]). The Examiner has not given patentable weight to the method limitation of "co-extruded" because it is germane to the issue of patentability of the wipe itself. It should be noted that the resulting final product is bonded together. It should be noted that the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The burden is upon the Applicant to show that the additional components do affect the basic and novel characteristics of the invention. For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See MPEP 2111.03. The Applicant may wish to amend the claim to use the transitional phrase "consisting of" which excludes any element, step, or ingredient not specified in the claim. For the purposes of examination at this time, the Examiner will interpret "consisting essentially of" as "comprising".

As to claim 2, Pelham teaches that the fibers in the meltblown web have a diameter ranging from 0.5 to 40 microns, preferably 10 to 35 microns (page 2, [0028]).

***Claim Rejections - 35 USC § 103***

9. Claims 7 and 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelham, SR (US 2004/0110443).

As to claims 7 and 9, Pelham discloses the claimed invention except for that the porous non-woven carrier web and the absorbent non-woven web have a weight of between 9 and 50 grams per meter as required by claims 6 and 8. It should be noted that basis weight is a result effective variable. As the basis weight increases, the web becomes more durable and heavier and as the basis weight decreases, the web becomes more flexible and lightweight. The basis weight is dependent on the desired end use. Absent evidence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create porous non-woven carrier web and the absorbent non-woven web have a weight of between 9 and 50 grams per meter as required by claims 6 and 8 since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the basis weight of the porous non-woven carrier web and the absorbent non-woven web in order to create suitably strong and flexible webs for use in wipes.

As to claim 10, Pelham teaches the claimed invention but fails to specifically teach that the polymers used can be co-polymers. It would have been obvious at the time the invention was made to use co-polymers for the fibrous abrasive finish motivated by the desire to create an abrasive finish having characteristics of two or more polymers.

As to claim 11, Pelham teaches that the abrasive finish has a basis weight of less than 500 gsm (page 2, [0030]).

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelham, SR (US 2004/0110443) as applied to claim 1 above, and further in view of Reeder et al. (US 6,468,931).

Pelham teaches the claimed invention above but fails to teach that the porous non-woven carrier web comprises between 20 – 50 bi-component low melting temperature fibers as required by claim 5 and the bi-component low melting temperature fibers comprise absorbency treated polyethylene and polypropylene as required by claim 6.

Reeder is directed to a multi-layer thermally bonded nonwoven fabric (Title) useful for various absorbent applications including wipes (column 7, lines 50 – 55). Reeder teaches a fabric comprising first and second prebonded nonwoven webs 10 and 12 (column 4, lines 20 – 27). Reeder teaches that the webs can be formed of substantially continuous filaments or formed of staple fibers and the webs can be of the same construction or different construction (column 4, lines 28 – 40). Reeder teaches that webs 10 and 12 can comprise thermoplastic fibers and may also include other, non-thermoplastic fibers (column 4, lines 55 – 60). Reeder teaches that the webs may be made by various methods including carding, air laying and garneting for staple fiber webs and spunbonding for continuous filament webs (column 5, lines 1 – 45). In a preferred embodiment, the resultant multilayer thermally bonded fabric has hydrophilic properties. When the prebonded webs are formed of a hydrophobic material, such as polypropylene, hydrophilic properties are imparted using any of the techniques known in the art such as using an additive to

Art Unit: 1771

impart hydrophilic properties to the surface of the fiber (column 7, lines 1 – 10). Reeder teaches that webs 10 and 13 are thermally bonded together by means of heated patterned calendar rolls (column 6, lines 1 – 35). Reeder teaches that at least one of the nonwoven webs can comprise a carded bonded staple fiber web (column 5, lines 1 – 20). Reeder teaches that one of the webs can comprise bicomponent fibers comprising polyethylene and polypropylene (column 5, lines 15 – 20). It should be noted that it is known in the art that polyethylene and polypropylene are both polymers, which have a low melting temperature. Reeder also notes that it is desirable to treat the thermoplastic fibers with an additive to impart hydrophilic properties (column 7, lines 1 – 10).

Since Pelham lacks disclosure to the specific nature of the absorbent carded web, it would have been necessary and thus obvious for one of ordinary skill in the art practicing the invention of Pelham to look to the prior art as exemplified by Reeder to provide the details of the carrier web. As absorbency treated carded polyethylene/polypropylene carrier webs exhibit superior liquid transport properties, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the absorbency treated carded polyethylene/polypropylene web of Reeder in the invention of Pelham, motivated by the expectation of successfully practicing the invention of Pelham.

As to claim 5, Pelham in view of Reeder discloses the claimed invention except that the porous carrier web comprises between 20 – 50% bi-component low melting temperature fibers. It should be noted that the amount of bi-component low melting fibers are a result effective variable. The amount of low melting bi-component fibers is dependent on the desired ease of bonding the material and desired end strength of the material. Absent evidence of unexpected



Art Unit: 1771

results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the porous carrier web comprises between 20 – 50% bi-component low melting temperature fiber since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of low melting bi-component fibers in order to create suitably strong and easily manufactured wipe.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1 - 12 have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 1771


however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer Boyd  
December 1, 2005

  
**Ula C. Ruddock**  
Primary Examiner  
Tech Center 1700